

Western Laboratories

Geotechnical Engineering

February 25, 2004

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Work Order 04-3739

MAR 03 2004

Haley & Aldrich, Inc.
San Diego

Mr. John Heiser
INNOVATIVE CONSTRUCTION SOLUTIONS, INC.
7125 Fenwick Lane, Suite O
Westminster, California 92683

Subject: Compaction Report
Excavation Backfill for
Secondary Structural Support
19503 S. Normandie Avenue
Los Angeles, California
Legal: Tract: 52172-01; Lot: 3; Parcel: A

Dear Sir:

This report presents our field observations and the results of compaction tests performed during the grading operation conducted at the subject site on January 28 and 29, 2004. The grading operation entailed the backfilling of an excavation created for environmental purposes. The engineered fill soils were placed for secondary structural support.

General Grading/Backfilling Procedures

The presence of native soils within the excavation bottoms were observed and approved by a representative of this company and the City of Los Angeles Grading Inspector. The native soils were scarified, moisture conditioned and compacted in-place to a minimum of 90 percent of ASTM D 1557A-00, utilizing a self-propelled vibratory compactor and rubber tire loaders.

On-site and imported fill soils were spread in 8-inch thick loose lifts and compacted to a minimum of 90 percent of ASTM D 1557A-00, using the aforementioned grading equipment. The fill lifts were treated in a similar manner. The maximum depth of fill placed was approximately 7.0 feet.

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Laboratory Tests

Modified proctor compaction tests were performed in accordance with ASTM D 1557A-00 on representative soil samples encountered during our testing. In this test, five layers of soil were placed into a four inch diameter mold and each layer was compacted by twenty-five blows delivered by a ten pound hammer dropped eighteen inches. The test was repeated at varying water contents until the modified maximum dry unit weight and modified optimum water content were determined. The test results are presented in the following table:

Soil Type	Classification	Optimum Moisture (%)	Max. Dry Density (Lbs./Cu.Ft.)
I	Brown Fine to Medium Sandy CLAY	10.0	126.0
II	Reddish Brown Clayey Fine to Medium SAND with Gravel	9.0	129.0

Field Compaction Tests

Compaction tests were performed using the Sand Cone Method (ASTM D 1556-90) and Nuclear Testing Device (ASTM D 2922-91 & 3017-88). These tests were performed to determine the relative density of the soil with respect to the maximum dry density. The compaction tests were performed at maximum intervals of two vertical feet.

The compaction tests results are presented on the attached Table I. The compaction test locations and limits of grading are depicted on the accompanying plot plan.

Surface Drainage

Adequate drainage away from the backfill area should be provided at all times. Appropriate measures should be taken to minimize infiltration of surface water into this area.



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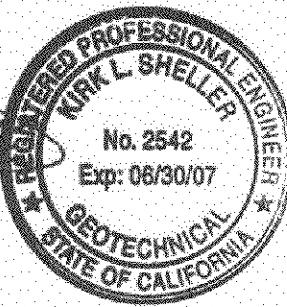
We appreciate this opportunity to be of service to you.

Very truly yours,

WESTERN LABORATORIES

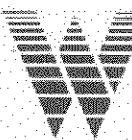


Kirk L. Sheller
Principal Engineer
GE 2542



cc: Mr. Alejandro Velazquez
CITY OF LOS ANGELES
DEPARTMENT OF BUILDING & SAFETY
1828 Sawtelle Boulevard, 2nd Floor
Los Angeles, California 90025





Western Laboratories

Geotechnical Engineering

CITY OF LOS ANGELES
DEPARTMENT OF BUILDING AND SAFETY
ENGINEER'S CERTIFICATE OF COMPLIANCE FOR COMPAKTED EARTH FILLS

LEGAL DESCRIPTION: Tract: 52172-01; Lot: 3; Parcel: A

ADDRESS: 19503 S. Normandie Avenue

SOIL TESTING AGENCY: Western Laboratories

PROPERTY OWNER'S NAME: ICS

OWNER'S ADDRESS: 7125 Fenwick Lane, Suite O
Westminster, California 92683

AREA TESTED: Excavation backfill for secondary structural support. (See plot plan for limits of grading).

PER REPORTS ON OUR PROJECT NO.: Work Order 04-3739

DATE WORK STARTED ON PROJECT: January 28, 2004

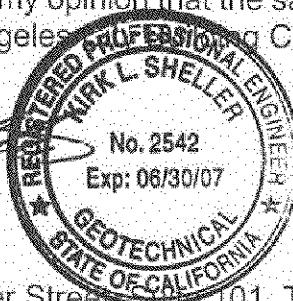
DATE FILL WAS COMPLETED: January 29, 2004

DATE OF THIS CERTIFICATE: February 25, 2004

TO THE SUPERINTENDENT OF BUILDING:

*I hereby certify that I have personally observed and tested the placement of compacted earth fill on the above described property, and on the basis of these observations and tests, it is my opinion that the same was placed in conformity with requirements of the Los Angeles Building Code.

Kirk L. Sheller
GE 2542



My address is 4030 Spencer Street, Suite 101, Torrance, California 90503-2456.

*For the purpose of this certificate, to "have personally observed and tested", shall include observation and testing performed by any person responsible to the licensed engineer signing this certificate. Where the observation and testing of all or part of the above work is delegated, full responsibility shall be assumed by the licensed engineer whose signature is affixed hereon.

TABLE I

Date	Test No.	Depth* (Ft.)	Moisture (%)	Unit Weight (Lbs./Cu.Ft.)	Relative Comp. %	Soil Type
01-28-04	101	4.0-4.5	10.6	116.0	92	I
01-28-04	102	3.0-3.5	9.9	119.4	93	II
01-28-04	103	4.0-4.5	10.4	115.3	92	I
01-28-04	104	3.0-3.5	9.6	118.2	92	II
01-28-04	105	4.0-4.5	10.6	115.7	92	I
01-28-04	106	4.5-5.0	10.8	115.1	91	I
01-28-04	107	7.0-7.5	10.9	116.2	92	I
01-28-04	108	5.0-5.5	9.5	119.0	92	II
01-28-04	109	2.0-2.5	9.8	119.5	93	II
01-28-04	110	2.0-2.5	9.1	118.6	92	II
01-28-04	111	3.0-3.5	9.4	118.2	92	II
01-28-04	112	2.0-2.5	9.7	113.8	88	II
01-28-04	**112A	2.0-2.5	9.5	116.1	90	II
01-29-04	113	1.0-1.5	9.0	120.5	93	II
01-29-04	114	2.0-2.5	9.6	118.0	91	II
01-29-04	115	0.5-1.0	8.9	121.0	94	II
01-29-04	116	0.0-0.5	9.2	118.6	92	II
01-29-04	117	0.0-0.5	10.0	117.0	91	II
01-29-04	118	0.0-0.5	9.0	117.7	91	II
01-29-04	119	0.0-0.5	9.6	117.3	91	II

*Measured below rough grade (in feet)

**Retest of low test after area reworked

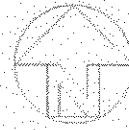
N = Nuclear gauge test

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KNOX STREET

NORMANDIE AVENUE



LEGEND
X APPROXIMATE LOCATION OF TUNNEL TRENCH
1/16 INCH = 10 FEET (2.5 METER)
LINES OF EXCAVATION
LINES OF DRAWDOWN

ICS

SCALE	1/16	1/16	1/16
DATE	05/25/04	05/25/04	05/25/04

1600 S. NORMANDIE AVENUE
LOS ANGELES, CALIFORNIA
90004-2200
44-379